

Ref.

# OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

*Edited by*

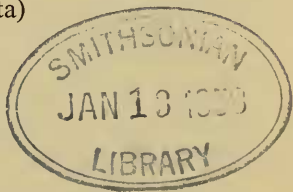
**FRANCIS HEMMING, C.M.G., C.B.E.**

Secretary to the Commission

**VOLUME 17. Part 14. Pp. 209—254**

## **OPINION 492**

Suppression under the Plenary Powers of the family-group name AUCELLIDAE Lanuseu, 1897, and rejection of an application for use of the same Powers to validate the generic name *Aucella* Keyserling, 1846, by suppressing the generic name *Buchia* Rouillier, 1845 (Class Lamellibranchiata)



**LONDON :**

Printed by Order of the International Trust for  
Zoological Nomenclature  
and

Sold on behalf of the International Commission on Zoological  
Nomenclature by the International Trust at its Publications Office  
41, Queen's Gate, London, S.W.7  
1957

**Price One Pound, Ten Shillings and Sixpence**

*(All rights reserved)*

# INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

## COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 492

### A. The Officers of the Commission

*Honorary Life President* : Dr. Karl JORDAN (*British Museum (Natural History), Zoological Museum, Tring, Herts., England*)

---

*President* : Professor James Chester BRADLEY (*Cornell University, Ithaca, N.Y., U.S.A.*) (12th August 1953)

*Vice-President* : Senhor Dr. Afranio do AMARAL (*Sao Paulo, Brazil*) (12th August 1953)

*Secretary* : Mr. Francis HEMMING (*London, England*) (27th July 1948)

### B. The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

Professor H. BOSCHMA (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) (1st January 1947)

Senor Dr. Angel CABRERA (*La Plata, Argentina*) (27th July 1948)

Mr. Francis HEMMING (*London, England*) (27th July 1948) (*Secretary*)

Dr. Henning LEMCHE (*Universitetets Zoologiske Museum, Copenhagen, Denmark*) (27th July 1948)

Professo Teiso ESAKI (*Kyushu University, Fukuoka, Japan*) (17th April 1950)

Professor Pierre BONNET (*Université de Toulouse, France*) (9th June 1950)

Mr. Norman Denbigh RILEY (*British Museum (Natural History), London*) (9th June 1950)

Professor Tadeusz JACZEWSKI (*Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland*) (15th June 1950)

Professor Robert MERTENS (*Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a. M., Germany*) (5th July 1950)

Professor Erich Martin HERING (*Zoologisches Museum der Humboldt-Universität zu Berlin, Germany*) (5th July 1950)

Senhor Dr. Afranio do AMARAL (*S. Paulo, Brazil*) (12th August 1953) (*Vice-President*)

Professor J. R. DYMOND (*University of Toronto, Toronto, Canada*) (12th August 1953)

Professor J. Chester BRADLEY (*Cornell University, Ithaca, N.Y., U.S.A.*) (12th August 1953) (*President*)

Professor Harold E. VOKES (*University of Tulane, Department of Geology, New Orleans, Louisiana, U.S.A.*) (12th August 1953)

Professor Béla HANKÓ (*Mezőgazdasági Múzeum, Budapest, Hungary*) (12th August 1953)

Dr. Norman R. STOLL (*Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.*) (12th August 1953)

Mr. P. C. SYLVESTER-BRADLEY (*Sheffield University, Sheffield, England*) (12th August 1953)

Dr. L. B. HOLTHUIS (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) (12th August 1953)

Dr. K. H. L. KEY (*Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia*) (15th October 1954)

Dr. Alden H. MILLER (*Museum of Vertebrate Zoology, University of California, U.S.A.*) (29th October 1954)

Doc. Dr. Ferdinand PRANTL (*Národní Museum V Praze, Prague, Czechoslovakia*) (30th October 1954)

Professor Dr. Wilhelm KÜHNELT (*Zoologisches Institut der Universität, Vienna, Austria*) (6th November 1954)

Professor F. S. BODENHEIMER (*The Hebrew University, Jerusalem, Israel*) (11th November 1954)

Professor Ernst MAYR (*Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.*) (4th December 1954)

Professor Enrico TORTONESE (*Museo di Storia Naturale "G. Doria", Genova, Italy*) (16th December 1954)

## OPINION 492

SUPPRESSION UNDER THE PLENARY POWERS OF THE FAMILY-GROUP NAME "AUCELLIDAE" LANUSEN, 1897, AND REJECTION OF AN APPLICATION FOR USE OF THE SAME POWERS TO VALIDATE THE GENERIC NAME "AUCELLA" KEYSERLING, 1846, BY SUPPRESSING THE GENERIC NAME "BUCHIA" ROUILLIER, 1845 (CLASS LAMELLIBRANCHIATA)

**RULING :—**(1) The request for the suppression of the generic name *Buchia* Rouillier, 1845 (Class Lamelli-branchiata) under the Plenary Powers is hereby rejected.

(2) Under the Plenary Powers the family-group name AUCELLIDAE Lanusen, 1897 (type genus : *Aucella* Keyserling, 1846) is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(3) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* with the Name No. 1231 :—

*Buchia* Rouillier, 1845 (gender : feminine) (type species, by monotypy : *Avicula mosquensis* von Buch, 1844, as defined by the lectotype selected by Pavlov (1907))

(4) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* with the Name No. 1440 :—

*mosquensis* von Buch, 1844, as published in the combination *Avicula mosquensis* and deferred as specified in (3) above (specific name of type species of *Buchia* Rouillier, 1845)

(5) The under-mentioned generic name is hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name No. 1058 :—

*Aucella* Keyserling, 1846 (a junior objective synonym of *Buchia* Rouillier, 1845)

(6) The under-mentioned family-group name is hereby placed on the *Official List of Family-Group Names in Zoology* with Name No. 196 :—

BUCHIIDAE Cox (L.R.), 1953, as validated by the suppression under the Plenary Powers in (2) above of the senior objective synonym AUCELLIDAE Lanusen, 1897 (type genus : *Buchia* Rouillier, 1845)

(7) The under-mentioned family-group name is hereby placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* with the Name No. 230 :—

AUCELLIDAE Lanusen, 1897, as suppressed under the Plenary Powers in (2) above (type genus : *Aucella* Keyserling, 1846)

## I. THE STATEMENT OF THE CASE

On 24th March 1954, Dr. J. A. Jeletzky (*Geological Survey of Canada, Ottawa, Canada*) submitted a preliminary application to the International Commission on Zoological Nomenclature for the use of the Plenary Powers for the purpose of validating the generic name *Aucella* Keyserling, 1846 (Class Lamellibranchiata) by suppressing under the same Powers the name *Buchia* Rouillier, 1845, which for many decades had been totally overlooked but



which in 1929 had been substituted by some authors for its objective junior synonym *Aucella* Keyserling. Consequent upon correspondence with the Office of the Commission, Dr. Jeletzky later revised his application in certain minor respects. The application so revised was formally submitted to the International Commission by Dr. Jeletzky on 9th January 1955. It was as follows :—

**Proposed use of the Plenary Powers to preserve the generic name “*Aucella*” Keyserling, 1846 (Class Lamellibranchiata, Order Anisomyaria, Family Aviculidae) and the specific name of its type species “*Avicula mosquensis*” von Buch, 1844, and to suppress the generic name “*Buchia*” Rouillier, 1845\***

By J. A. JELETZKY

(*Geological Survey of Canada, Ottawa, Ontario, Canada*)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers for the purpose of preserving the very well-known generic name *Aucella* Keyserling, 1846 (*Wiss. Beobacht. Petschora*, 1846 : 297—301, pl. 16) which, in the absence of intervention by the Commission, must fail as a junior objective synonym of the long-overlooked or ignored name *Buchia* Rouillier, 1845 (*Bull. Soc. imp. Nat. Moscou* 18 : 289), for the species *Avicula mosquensis* von Buch, 1844 (*Neue Jahrb. f. Min.* 1844 : 537) is the type species of *Aucella* by selection by Herrmannsen (1852, *Ind. Gen. Malac.*, Suppl. : 14) and of *Buchia* by monotypy. The original material of von Buch has been re-studied by Pavlov (1907 : 23—25, pl. II, figs. 5—7) who selected the specimen shown as figs. 5a—5c on plate II to be the lectotype of this species. The need for the protection of the name *Aucella* Keyserling is one of urgency if serious confusion is to be avoided, for, while some palaeontologists have attempted to replace this name by the name *Buchia* Rouillier, the majority of palaeontologists and biostratigraphers throughout the world still adhere to the name *Aucella*.

2. Representatives of the genus *Aucella* (Class Lamellibranchiata, Order Anisomyaria, Family AVICULIDAE) are distributed virtually world wide in rocks of the Upper Jurassic (from Oxfordian to Portlandian stage inclusive) and early Lower Cretaceous (from Infravalangian to Hauterivian stage inclusive) age, and are perhaps the most

---

\* Published by permission of The Deputy Minister, Department of Mines and Technical Surveys, Ottawa, Ontario, Canada.

conspicuous faunal element of rocks of this age throughout the extended circumpolar region. The genus includes over one hundred of recognised species and varieties, most of which are fair to excellent zonal fossils with an extremely wide (mostly intercontinental to circumboreal) horizontal distribution and a great facies tolerance. In particular for the extended circumpolar region of the upper Jurassic and early Lower Cretaceous times, which is generally referred to as the Boreal province, the stratigraphical importance of *Aucella* species appears to be second only to that of the ammonites. In this region a stratigrapher often does not meet any diagnostic forms but *Aucella* in the rocks of that age and must needs to base his correlations on the representatives of this genus alone. Also in the Indo-Pacific region species of *Aucella* provide valuable zonal fossils for the rocks of the above age.

3. Because of its geographical distribution and stratigraphical importance the name *Aucella* entered most textbooks on stratigraphical palaeontology, historical geology, textbooks and treatises of invertebrate palaeontology (including many elementary texts), and manuals of index fossils and regional stratigraphy throughout the world before its validity was challenged. It is not possible to give a complete list of publications in which this name appears but the following selection of the most important references known to the writer gives an idea of its truly universal use.

- (i) Textbooks, treatises, and manuals of stratigraphical palaeontology, historical geology, and regional stratigraphy :
  - (a) England : Neaverson's *Stratigraphical Palaeontology* (1928 : 387) ; Gregory & Barrett's *General Stratigraphy* (1931 : 164—165) ; Stamp's *Introduction to the Stratigraphy of British Isles* (1931 : 164—165, 1950 : 248—259) ;
  - (b) France : Haug's (1911) and Lapparent's (1900) classical treatises of geology ; Gignoux's *Geologie Stratigraphique* (1933, 1944, 1950 : 345, 376—377, 429, 449) ;
  - (c) Germany : all editions of Kayser's *Grundzüge der Geologie* (incl. 1924) ; Kayser & Brinkmann's *Grundzüge der Geologie* (1948 : 210, pl. 40(2)) ; Salomon's *Grundzüge der Geologie* (1926, II : 413, 374, fig. 19) ; Daqué's *Wirbellose der Jura* (1933, 1937) and *Wirbellose der Kreide* (1944) ; Bubnoff's *Geologie von Europa* (1935) ;
  - (d) U.S.S.R. : *Standard treatises of the general Historical Geology* by Borissiak (1935 : 256, 259—260, 270—274, 293) ; Masarovich (1937) ; Korovin (1941 : 303, 306, 322, 326, 342, 346, fig. 154—158), and Strachov's (1938, 1948, 2 : 166, pl. XXII (3) and : 204, pl. XXIV (3)) ; Masarovich's (1938) and Arkhangelsky's (1935, 2 : 18—24, 27, 50, 52, 54, 61) standard manuals of the Geology and Stratigraphy of U.S.S.R. ;
  - (e) U.S.A. : Pearson & Schuchert's (1914 : 848, 850, 871—872, 884, fig. 464) ; Longwell's *et al.* (1941, 1950 : 207, pl. VI—7) ; Dunbar's (1949, pl. 14—16), and Grabau's (1920 : 653, 666, 669—670, 709, 714, 727, fig.

1651) standard textbooks of historical geology and Willis (1912) *Index to the Stratigraphy of North America*; (f) New Zealand: Marshall's *Geology of New Zealand* (1912: 187, fig. 104); (g) Brazil: de Oliveira & Leonardo's *Geologia do Brasil* (1943: 565); (h) Indonesia: van Bemmelen's *The Geology of Indonesia, General Geology* (1949: 65—66, 69—71, 74).

- (ii) Textbooks and treatises of invertebrate palaeontology: (a) England: Wood's *Palaeontology* (1950: 253, and the older editions); (b) France: Piveteau's *Traité de Palaeontologie*, II (1952: 276, fig. 69); (c) Germany: all editions of the classical Zittel's *Grundzüge der Palaeontologie*, including Zittel/Broily (1924) and his *Handbuch der Palaeontologie*; (d) U.S.S.R.: all older standard textbooks of palaeontology, e.g., such as Borissiak (1905—1906), Yakovlev (1918, 1928); Russian revision of Zittel's *Grundzüge* (Zittel/Riabinin, 1934: 611—612, text-fig. 1016); latest Soviet textbooks of palaeontology by Ilovaisky (1937) and Davitasvili (1941, 1949: 244, fig. 234); (e) U.S.A.: Zittel/Eastman's *English Revision of Zittel's Grundzüge* (1912).

4. The number of papers and monographs devoted to the description of representatives of *Aucella* or dealing with its individual species among the other faunal groups, runs into several hundreds. Though it is not possible to list them all here, a selected bibliography of most important modern papers appended to this paper gives an idea about the number of *Aucella* papers and monographs involved. The older literature on the subject is well covered in Pavlow's (1907) monograph of the genus.

5. Thus, since its first proposal and until 1929—1930 the name *Aucella* Keyserling, 1846, was in very frequent and constant use throughout the world and the writer does not know of a single case where the name *Buchia* Rouillier, 1845, was used, although it was known practically to everybody (see for example Lahusen, 1888; Pavlow, 1907; Pompeckj, 1901).

6. As the greater part of the publications listed above was published subsequent to the previously mentioned attempt to discredit the name *Aucella*, it appears quite evident that the majority of leading palaeontologists and biostratigraphers throughout the world rejected summarily this attempt. Subsequent to this latter date only the following textbooks, treatises, and manuals known to the writer adopted the name *Buchia*: (1) Germany: Teichert's *Geology of Greenland* (1939); (2) U.S.A.: Shimer & Shrock's *Index Fossils of North America* (1943: 393—394, pl. 153, figs. 12—16) and Moore's *et al. Invertebrate Fossils* (1952: 432—433, figs. 1a—1b); (3) Australia: David's *Geology of Australia* (1950: 464, 468).

7. Similarly among the authors of scientific papers and monographs on palaeontology only a few have accepted the name *Buchia* (e.g., Crickmay, 1933 ; Spath, 1935, 1947, 1952 ; Donovan, 1953 ; Teichert, 1939, 1941 ; Glaessner, 1941 ; Marwick, 1953), while some others (e.g., Anderson, 1938 : 102 ; 1945 : 963 ; Maync, 1949 : 14) have emphatically rejected its use. Most of palaeontologists and biostratigraphers the world over have, however, simply ignored the issue and proceeded to use the well established name *Aucella* indiscriminately. In addition to the above given selection of textbooks, treatises, and manuals, see papers of Bodylevsky (1936, 1943), Frebold (1933, 1953), Frebold & Stoll (1937), Krumbeck (1934), Imlay (1953), Imlay & Reeside (1954), McLearn & Kindle (1950), to mention only a few. The doubts of Stewart (1930) quoted below as to the possibility of the universal acceptance of the name *Buchia* were, as we see, wholly justified.

8. Furthermore, it should be noted that most of the modern authors who have adopted the name *Buchia* have either used it concurrently with *Aucella* (e.g., *Buchia* ("Aucella")) throughout their papers or have indicated in some other way that they use it instead of this latter name. Thus, they have clearly shown that they are well aware of the fact that the name *Buchia* is likely to be completely unfamiliar to their readers.

9. Cox (1929 : 147) apparently was the first to accept the priority of the name *Buchia* but he did not give any reasons.

10. In 1930 Stewart (1930 : 106—108) made another attempt to revindicate the name *Buchia* presuming it to have priority over that of *Aucella* and has made the following statement on the subject :

The name *Aucella* was proposed by Keyserling in 1846 (*Wissenschaft. Beobacht. Petschora*, 1846 : 297—301, pl. 16) for a number of species including *Avicula mosquensis* von Buch which was later designated as the type species (Herrmannsen, *Ind. Gen. Malac. Suppl.* 1852 : 14).

The name *Buchia* was proposed by Rouillier in 1845 (1845 *Bull. Soc. Imp. Nat. Moscow*, 18 : 289)† for the already figured *Avicula mosquensis* von Buch as the monotype species. He also published illustrations of this fossil the following year, but without an explanation of the plate (*ibid.* 1846, 19(2) : pl. D, fig. I, 2). In 1848, an

---

† "Le premier Secrétaire Mr. le Professeur Rouillier, a présenté un exemplaire caractéristique de l'avicula mosquensis récemment décrite par M. de Buch. Mr. Rouillier trouvant que ce fossile diffère par ses caractères génériques de toutes les coquilles connues jusqu'à présent propose d'en constituer un nouveau genre sous le nom de *Buchia*, en l'honneur de Mr. de Buch qui le premier a montré les caractères distinctifs de l'*Inoceramus dubius*."



explanation of the plate was published (Rouillier, *ibid.*, 1848, 21(2) : 272) and it was also pointed out that the name *Buchia* had priority over *Aucella* Keyserling, 1846. The 1848 reference to *Buchia* was listed by Lahusen (*Mem. Com. Geol.*, 1888, 8(1) : 2) and Pavlow (*Soc. Imp. Nat. Moscow Nou. Mem.* 1907, 17(1) : 3), while Pompeckj (1901 *N. Jahrb. Min. Beil.* Bd. 14 : 321) cited the 1845 reference but refused to accept the older name. The validity and priority of *Buchia* is clear and there seems no ground for not recognising it unless the name be arbitrarily set aside in favour of *Aucella* which is so well known. Rouillier also claimed to have published this name in "Discours 1845, p. 52", apparently later than in the *Bulletin*. This Discours probably refers to Rouillier's paper on the fauna of the Moscow region which was also mentioned by Pavlow (*op. cit.* : 23). I have not seen this paper. Erman published an extensive resumé of it in 1847 (*Arch. Wissensch. Kunde Russland* 5 : 443—482) in which *Avicula mosquensis* is mentioned on pp. 460, 461, but *Buchia* is not mentioned. According to Pavlow, however, *Buchia mosquensis* was mentioned on page 52 of the original and a reference to von Buch's figures was cited so that the name was probably proposed twice by Rouillier in 1845 though the second time may have been in the Russian language.

In order to avoid the transfer of familiar generic names from one group to another, the International Commission on Zoological Nomenclature has waived the rules for *Holothuria* and *Physalia* and *Spirifer* (*Opin.* 76, 80, 100). The Commission may likewise decide to retain *Aucella*. However, since the name *Aucella* is not to be transferred to some other group but suppressed for an earlier name, I think it unlikely that the Commission will ignore the earlier *Buchia* in favour of *Aucella*. *Buchia* should have been adopted long ago when the change would have been relatively easy. Now it will be many years, if ever, before the change will be universally accepted.

11. The writer deplores the action of Stewart (1930) in accepting the priority of *Buchia* instead of continuing to use the name *Aucella*, all the more so in view of the fact that he actually considered the question of an appeal being made to the International Commission to validate the latter name. Clearly, the right thing for him to have done would have been to ask the Commission to preserve the name *Aucella* under its Plenary Powers and to have continued to use that name while his application was under consideration by the Commission.

12. Even if the name *Buchia* should be ruled available by the Commission from the second paper of Rouillier (1845a), or the above mentioned anonymous lay report should be considered by the Commission as a valid scientific publication, the writer does not



consider it advisable to give *Buchia* the priority over *Aucella*. The proper course would then appear to be to rule the former name arbitrarily out, under the suspension of Rules, in favour of *Aucella*. Indeed, as demonstrated in the previous pages of this application, and as recognised even by Stewart (1930) himself, the latter name has a well documented, long established record ; it has been used by all authors concerned throughout the world ever since its proposal, has entered all important palaeontological monographs, textbooks, stratigraphical manuals, etc. Even now, 25 years after the unfortunate attempt to discredit it, the name *Aucella* is still in general use among palaeontologists and stratigraphers of the world, the adherents of the name *Buchia* being in a clear minority. In the opinion of the writer the name *Aucella* is so deeply rooted in the literature that no Rule of Priority should be invoked now to upset the usage. As already stated by Anderson (1938 : 102) and by Stewart (see quotation in paragraph 10 above) any such attempt is likely to produce greater confusion than uniformity.

13. Thus, it is proposed that the name *Buchia* be suppressed under the Plenary Powers in favour of *Aucella*, and that the name *Aucella* be added to the *Official List of Generic Names in Zoology*. This is to be done either because the name *Buchia* is not available from the original publication, or because of a well documented and long established, and still current, usage of the name *Aucella*. It is hoped that it will be possible for the International Commission to reach an early decision on these questions, as such a decision is urgently required in connection with the preparation of the forthcoming international Treatise on Invertebrate Palaeontology.

14. The International Commission is accordingly asked :—

- (1) to suppress the under-mentioned generic name under its Plenary Powers for the purposes of the Law of Priority but not for those of the Law of Homonymy :—*Buchia* Rouillier, 1845 ;
- (2) to place the under-mentioned generic name on the *Official List of Generic Names in Zoology* :—*Aucella* Keyserling, 1846 (gender : feminine) (type species, by selection by Herrmannsen (1852) : *Avicula mosquensis* von Buch, 1844) ;
- (3) to place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—*Buchia* Rouillier, 1845, as suppressed under the Plenary Powers under (1) above ;
- (4) to place the under-mentioned specific name on the *Official List of Specific Names in Zoology* :—*mosquensis* von Buch, 1844, as published in the combination *Avicula mosquensis*, as defined

by the lectotype selected by Pavlow (1907) (specific name of type species of *Aucella* Keyserling, 1846).

### References

- Anderson, F. M., 1938. "Lower Cretaceous deposits in California and Oregon." *Geol. Soc. Amer.*, Special Paper 16, 339 pages, 84 plates, 3 text-figs., 2 tables (*Aucella* described : 101—108)
- Anderson, F. M., 1945. "Knoxville Series in the California Mesozoic." *Geol. Soc. Amer. Bull.* 56(10) : 909—1014, 15 plates (*Aucella* described : 963—973)
- Bodylevsky, V., 1936. "On the Jurassic and Lower Cretaceous Fossils from the collection of A. Petrenko from Novaya Zemlya." *Trans. Arctic Institute, USSR, Leningrad*, 1936 : 113—136, plates I—II
- Bodylevsky, V., 1943. "On the Lower Cretaceous Fauna of the Suchan Coal Region." *Comptes Rendus (Doklady) Acad. Sci. USSR*, 41 (No. 6) : 252—254
- Cox, L. M., 1929. "Synopsis of the Lamellibranchia and Gastropoda of the Portland Beds of England." *Proc. Dorset nat. Hist. & Arch. Soc.* 50 : 131—202, 6 plates. (" *Buchia* " *mosquensis* (Buch) described without any taxonomic comments : 146—147)
- Crickmay, C. M., 1933. "Some of Alpheus Hyatt's unfigured types from the Jurassic of California." *U.S. geol. Survey, Prof. Paper* 175 : 51—58, plates 14—18 (the name *Buchia* is used without taxonomic comments : 53—56)
- Donovan, D. T., 1953. "The Jurassic and Cretaceous stratigraphy and palaeontology of Traill Ø, East Greenland." *Meddelelser om Grønland*, 111(4), 150 pages, 25 plates, 41 text-figures
- Erman, A., 1848. Abstract of : "Rouillier, K. Über die Fauna des Moskauer Gouvernements und ihre Veränderungen in der einzelnen Epochen der Erdbildung" (vgl. K. Rouillier, 1845b). *Archiv für wissenschaftl. Kunde in Russland* 5, Berlin
- Frebold, H., 1933. Untersuchungen über die Verbreitung, Lagerungsverhältnisse und Fauna des oberen Jura von Oströngland. *Meddelelser om Grønland*, 94 (No. 1), 81 pages, 3 plates, 14 text-figs.
- Frebold, H., 1953. "Correlation of the Jurassic of Canada." *Geol. Soc. Amer. Bull.* 64(10) : 1229—1246, correl. chart.

- Frebold, H. und E. Stoll, 1937. "Das Festungsprofil auf Spitzbergen. III. Stratigraphie und Fauna des Jura und der Unterkreide." *Skrifter om Svalbard og Ishavet* **68** (Oslo), 85 pages, 1 plate, 2 text-figs.
- Glaessner, M. F., 1943. "Problems of Stratigraphic Correlation in the Indo-Pacific Region." *Proc. R. Soc. Victoria* **55** (n.s.) (1) : 41—80, correl. chart
- Imlay, R. W., 1952. "Correlation of the Jurassic Formations of North America, exclusive of Canada." *Geol. Soc. Amer. Bull.* **63**(9) : 953—992, 4 text-figs., 2 correl. charts
- Imlay, R. W., and Reeside, J. B., Jr., 1954. "Correlation of the Cretaceous Formations of Greenland and Alaska." *Geol. Soc. Amer. Bull.* **65**(3) : 223—246, 1 correl. chart
- Keyserling, A., 1846. Wissenschaftliche Beobachtungen auf einer Reise in das Petschora-Land im Jahre 1843, St. Petersburg, Carl Kray (*Aucella* proposed)
- Krumbeck, L., 1934. "Beiträge zur Paläontologie des Ostindischen Archipels. 10. Die Aucellen des Malms von Misol." *Neues Jahr. für Min.*, Beil. Bd. **71** (Abt. B) : 422—469, plates XIV—XVI
- Lahusen, I., 1888. "Über die russischen Aucellen." *Mém. Comité géol.* **8** (Pt. 1), St. Petersburg
- McLearn, F. H., 1949. "Jurassic Formations of Maude Island and Alliford Bay, Skidegate Inlet, Queen Charlotte Islands, British Columbia." *Geol. Survey Canada Bull.* **12**, 19 pages, 2 geol. maps
- McLearn, F. H., and Kindle, E. D., 1950. "Geology of north-eastern British Columbia." *Geol. Survey Canada Memoir* **259**, 236 pages, 8 plates, 17 geol. maps and sections, 1 correl. table, 5 tables
- Marwick, J., 1953. "Divisions and Faunas of the Hokonui System (Triassic and Jurassic)." *New Zealand Geol. Survey, Palaeont. Bull.* **21**, 142 pages, 17 plates
- Maync, Wolf, 1949. "The Cretaceous beds between Kuhn Island and Cape Franklin (Gauss Peninsula), Northern East Greenland." *Meddelelser om Grønland* **133** (No. 3), 291 pages, 4 plates, 70 text-figs.
- Pavlow, A. P., 1907. "Enchainement des Aucelles et des Aucellines du Crétacé russe." *Nouv. Mém. Soc. imp. Nat. Moscou* t. **17**, 93 pages, 6 plates, 8 text-figs., 1 table

- Pompeckj, I. F., 1901. "Ueber Aucellen und Aucellen-ähnliche Formen." *Neues Jahrb. für Min., Beil. Bd.* **14** : 319—368, plates XV—XVII
- Rouillier, Ch., 1845a. Discours sur les Animaux du gouvernement de Moscou, prononcé à la cloture due cours academique de l'année scolaire 1844—1845 (=O jivotnych Moskovskoi gubernii, etc.). Moskwa, W'Universitetskoi tipografii, 4 to, 96 pages (*non vidi*)
- "Rouillier, Ch.", 1845b. [No title of the paper as in the report there is only an anonymous remark about the name *Buchia* proposed by Prof. Rouillier for *Avicula mosquensis* Buch.] *Bull. Soc. imp. Nat. Moscou* **18** (Protokoly) : 289
- Rouillier, Ch., 1846. "Explication de la Coupe géologique des environs de Moscou. 2<sup>e</sup> partie." *Soc. imp. Nat. Moscou* **19** : 359—467, plates A—E. [On the plate D3 species of "*Buchia*" are figured without any text or explanation to the plate, which have been given only later (see Rouillier, 1848)]
- Rouillier, Ch., 1848. "Etudes progressives sur la Géologie de Moscou." *Bull. Soc. imp. Nat. Moscou* **21** : 263—288, pls. F. G. H. [This publication represents the explanation of the plates A—E of the previous publication (see Rouillier, 1846). Here the name *Buchia* is formally introduced and a claim is made for the validity of the publication of this name in 1845a—b]
- Spath, L. F., 1935—1936. "The Upper Jurassic invertebrate faunas of Cape Leslie, Milne Land. 1. Oxfordian and Lower Kimmeridgian ; 2. Upper Kimmeridgian and Portlandian." *Meddelelser om Grønland* **99** (Nos. 2—3)
- Spath, L. F., 1947. "Additional observations on the Invertebrates (chiefly ammonites) of the Jurassic and Cretaceous of East Greenland. I. The *Hectoroceras* fauna of S.W. Jameson Land." *Meddelelser om Grønland* **132** (No. 3), 69 pages, 5 plates, 8 text-figs.
- Spath, L. F., 1952. "Additional observations on the invertebrates (chiefly ammonites) of the Jurassic and Cretaceous of East Greenland. II. Some Infra-Valangian ammonites from Lindemans Fjord, Wollaston Forland ; with a note on the base of the Cretaceous." *Meddelelser om Grønland*, **133**(4), 140 pages, 4 plates, 1 text-fig.
- Stewart, Ralph B., 1930. "Gabb's California Cretaceous and Tertiary Type Lamellibranchs." *Acad. nat. Sci. Philad., Special Publ.* No. 3, 314 pages, 17 plates, 5 text-figs.
- Teichert, C., 1939. Geology of Greenland (*in* "Geologie der Erde. Geology of North America **1**", 1939). Verlag. Gebr. Borntraeger, Berlin, pp. 100—175, 13 text-figs., 1 table

Teichert, C., 1941. "Marine Jurassic of East Indian affinities at Broome, North-Western Australia." *J. Roy. Soc. Western Australia* 26 : 103—118, 1 map, 1 plate (1939/40).

## II. THE SUBSEQUENT HISTORY OF THE CASE

**2. Registration of the present application :** Upon the receipt in 1954 of Dr. Jeletzky's preliminary application, the question of the use of the Plenary Powers for the purpose of validating the generic name *Aucella* Keyserling, 1846 (Class Lamelli-branchiata), was allotted the Registered Number Z.N.(S.) 827.

**3. Publication of the present application :** The present application was sent to the printer on 2nd February 1955 and was published on 31st May of the same year in Part 5 of Volume 11 of the *Bulletin of Zoological Nomenclature* (Jeletzky, 1955, *Bull. zool. Nomencl.* 11 : 158—166).

**4. Issue of Public Notices :** Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* 4 : 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was issued on 31st May 1955 (a) in Part 5 of Volume 11 of the *Bulletin of Zoological Nomenclature* (the Part in which Dr. Jeletzky's application was published) and (b) to the other prescribed serial publications. In addition such Notice was given to four general zoological serial publications and to three palaeontological serials in Europe and America respectively.

**5. Extension by three months of the Prescribed Six-Month Waiting Period following publication of the present application in the "Bulletin of Zoological Nomenclature" :** In view of the



fact that, as was clear, opinion among specialists was divided as to the action which it was desirable that the International Commission should take in the present case, the Secretary took the view that it would be of advantage to extend by three months the Prescribed Six-Month Waiting Period in the present case in order to afford a fuller opportunity for specialists to furnish comments on the proposals submitted by Dr. Jeletzky. Accordingly, on 31st December 1955, Mr. Hemming, as Secretary, executed a Minute directing that the Prescribed Waiting Period be extended for a further period of three calendar months to 28th February 1956.

**6. Comments Received :** During the Prescribed Waiting Period as extended by the direction given in the Minute executed by the Secretary on 31st December 1955 (paragraph 5 above) comments on the application submitted by Dr. Jeletzky were received from thirteen specialists. Of these, six supported Dr. Jeletzky's proposals, six objected to those proposals, while one did not express a definite opinion. The communications so received are reproduced in the following paragraphs.

**7. Support received from R. W. Imlay and John B. Reeside, Jr. (U.S. National Museum, Washington, D.C., U.S.A.) :** On 21st October 1955, Mr. R. W. Imlay and Mr. John B. Reeside, Jr. (both of the *U.S. National Museum, Washington, D.C., U.S.A.*) addressed the following letter in support of the application to the Office of the Commission :—

The undersigned wish to support the application of J. A. Jeletzky for the use by the Commission of its Plenary Powers to conserve the generic name *Aucella* Keyserling and to suppress the generic name *Buchia* Rouillier.

The actual priority of *Buchia* over *Aucella* seems to us highly dubious. Even if it were granted, there could result only the displacement by *Buchia* of the widely used and well understood name *Aucella*, and the writers see no approach to stability in such an upset. In America the species of the genus are common in the late Jurassic and early Cretaceous deposits, extending from Alaska along the Pacific Coast into Latin America. In all writings, except one paper by R. B. Stewart, one paper by C. H. Crickmay, and two text-books, the name *Aucella*

has been used for the genus, and we judge that nearly the same condition has prevailed elsewhere in the world. It seems to us that only confusion can come from the formal substitution of *Buchia* for *Aucella* and we therefore wish to record our hope that the Commission will rule for *Aucella*.

**8. Support received from Wolf Maync (Venezuelan Atlantic Refining Company, Caracas, Venezuela) :** On 9th January 1956, Dr. Wolf Maync (*Venezuelan Atlantic Refining Company, Caracas, Venezuela*) addressed the following letter to the office of the Commission in support of the present case :—

A few days ago I received a separate of Dr. Jeletzky's appeal to the International Commission for the preservation of the generic name *Aucella* Keyserling, 1846, in favor of *Buchia* Rouillier, 1845.

I fully endorse Dr. Jeletzky's viewpoint in this respect and sincerely believe that it would be most unfortunate to drop the time-honoured and world-wide used name *Aucella* in favor of the generally ignored term *Buchia*, in spite of the latter's actual priority. By far the greater part of authors throughout the world have long accepted the familiar name *Aucella* and it would create an unbelievable confusion if it should now at once be cancelled, after having been applied in countless publications for a great number of years. Every paleontologist and geologist is familiar with the term *Aucella* but not with the name *Buchia*.

I wish to stress once more that I positively support the opinion to retain the name *Aucella* in favor of *Buchia*.

**9. Two notifications of support and one objection communicated by Dr. Jeletzky :** In a letter dated 26th January 1956, Dr. Jeletzky notified the Office of the Commission that he had received comments on his application from three colleagues to whom he had communicated separates of the paper containing his application. The specialists concerned were :—(a) F. H. McLearn (*Senior Geologist (retired), Geological Survey of Canada*) ; (b) S. Wm. Muller (*Stanford University, School of Mineral Sciences, Stanford, California, U.S.A.*) ; (c) Curt Teichert (*Petroleum Geology Laboratory, Federal Center, Denver, Colorado, U.S.A.*). On receiving the foregoing letter, the Secretary informed Dr. Jeletzky that he would include these comments in the report

which would later be made to the International Commission but asked that as a preliminary Dr. Jeletzky should obtain the consent of the specialists concerned. In due course Dr. Jeletzky notified the Office of the Commission (*in litt.*, 5th April 1956) that he had complied with the foregoing request. Further particulars are given in paragraphs 10, 11, and 17 below.

**10. Support received from F. H. McLearn (Senior Geologist (retired), Geological Survey of Canada, Ottawa, Canada) :** In the letter dated 26th January 1956 referred to in paragraph 9 above Dr. Jeletzky submitted the following report on the intimation of support for the proposal for the preservation of the generic name *Aucella* Keyserling which he had received from Dr. F. H. McLearn (*Senior Geologist (retired), Geological Survey of Canada, Ottawa, Canada*) :—

With regard to the specialists' opinions on the case of *Aucella* versus *Buchia*, I have had three opinions expressed to me till now. Two of them are in favor of suppression of *Buchia* and retention of *Aucella*. One of them was given to me by Dr. F. H. McLearn, Senior Geologist (retired) of this Survey (i.e. the Geological Survey of Canada) and outstanding specialist on Mesozoic stratigraphy and palaeontology.

**11. Support received from S. Wm. Muller (Stanford University, Stanford, California, U.S.A.) :** On 15th May 1956, Dr. Jeletzky communicated to the Office of the Commission the following copy of a letter dated 26th April 1956 in support of the proposed validation of the generic name *Aucella* which he had received from Professor S. Wm. Muller (*Stanford University, School of Mineral Sciences, Stanford, California, U.S.A.*) :—

Thank you for your note of April 5th. By all means quote as much as you can from my correspondence that will serve the purpose.

I regret very much that the pressure of work prevents me from preparing a separate statement on behalf of *Aucella*.

**12. Support received from Hubert G. Schenck (Palo Alto, California, U.S.A.) :** On 21st February 1956, Dr. Hubert G. Schenck (*Palo Alto, California, U.S.A.*) addressed the following

letter to the Office of the Commission in support of the present case :—

I have read the statement prepared by Dr. J. A. Jeletzky, concerning *Aucella*, and I support his appeal.

My support is based on the fact that the name *Aucella* is widely accepted, whereas *Buchia* has not been widely recognised. For purely practical reasons, therefore, I feel that it would be a mistake to uphold *Buchia*.

**13. Objection received from C. A. Fleming and J. Marwick (New Zealand Geological Survey, Wellington, New Zealand) :** On 24th November 1955, Dr. C. A. Fleming (*New Zealand Geological Survey, Wellington, New Zealand*) communicated to the Office of the Commission the following comment by himself and Dr. J. Marwick, also of the New Zealand Geological Survey, in which these specialists expressed their objection to the proposals in the present case :—

Dr. J. A. Jeletzky's spirited proposal that the name *Buchia* Rouillier, 1845, be suppressed in favour of *Aucella* Keyserling, 1846, would have been very welcome if it had been implemented a few years after the first application of the rules to this case by Cox in 1929 and by Stewart in 1930. In the quarter century since these authors pointed out that *Buchia* is the earliest nomenclatorially valid name for the group typified by *Avicula mosquensis* von Buch, the name *Buchia* has been correctly applied by more and more systematists working on Mesozoic lamelli-brachs. The junior homonym *Aucella* has continued in use (as documented in detail by Jeletzky) in new editions of textbooks originally published before 1930 and in some new works published since that date, but *Buchia* is used in important textbooks such as those by Shimer and Shrock (1943) and by Moore, Lalicker and Fischer (1952). In general (but with exceptions) systematic paleontologists have applied the rules and used *Buchia* and stratigraphers have used the junior homonym *Aucella*.

We do not accept Jeletzky's claim that the majority of leading paleontologists and biostratigraphers throughout the world rejected summarily the attempt to discredit the name *Aucella*. Many of them have conscientiously tried to follow the rules when they realised the position, even when this resulted in some temporary inconvenience through the loss of a familiar generic name. In New Zealand, for instance, the name *Buchia* was introduced in 1933 in a stratigraphical



report (*N.Z. Geol. Surv. 27th An. Rep.* : 5) and has since been used consistently.

The name *Buchia* is in our opinion now so current (among stratigraphers and university teachers as well as among systematic paleontologists), that its suppression would cause just as much confusion as has been brought about by the normal operation of the Law of Priority. Many authors now cite both names (e.g., *Buchia* ("Aucella")); if *Buchia* were suppressed we believe such authors would still feel obliged to cite both names (e.g., *Aucella* ("Buchia")) for the benefit of readers unaccustomed to the name *Aucella*.

**14. Objection received from L. R. Cox (British Museum (Natural History), London) :** On 7th December 1955, Dr. L. R. Cox (*British Museum (Natural History), London*) addressed to the Office of the Commission the following objection to the proposals submitted in the present case :—

I wish to express my disagreement with the proposal submitted by J. A. Jeletzky for the suppression of the generic name *Buchia* Rouillier, 1845, in favour of its junior synonym *Aucella* Keyserling, 1846. This is one of many cases in which generic names which were formerly widely used have been discarded in favour of senior synonyms by authors convinced that the best path to uniformity in nomenclature is the observance of the Law of Priority. Experience has shown that the inconvenience of the re-introduction of less familiar names in such cases has been much exaggerated by those opposed to this course of action, and that within a generation, the re-introduced senior names have in most cases become the familiar ones, and the discarded names acquired an out-moded sound. The generic name *Pteria* Scopoli, for example, is now much more familiar than its junior synonym *Avicula* Lamarck, once in universal use, and *Glycymeris* Da Costa has similarly replaced *Pectunculus* Lamarck. Something might be said for the suppression of a newly discovered senior synonym immediately upon its disinternment, but to go back upon changes introduced 25—60 years ago by those basing their practice on observance of the International Rules would invite endless other applications for use of the Plenary Powers to revive junior synonyms once current, and instability would re-appear just when uniformity was on the point of being achieved by application of the International Rules.

The generic name *Buchia* was first revived over 25 years ago and has since been used in scientific papers and monographs by quite a number of responsible specialists, some of whom are mentioned by Dr. Jeletzky (*loc. cit.* p. 160), and in modern textbooks of such outstanding



importance as Shimer and Shrock's *Index Fossils of North America* (1943) and *Invertebrate Fossils* by R. C. Moore *et al.* (1952). To many workers of the newer generation it is already a more familiar name than *Aucella* and if allowed to take its course it cannot now fail to be in almost universal use within a relatively short space of time. In my view the suppression of *Buchia* in favour of *Aucella* would now be a retrograde step likely to bring discredit upon the International Rules. I would therefore recommend that the International Commission should render an *Opinion* in the following sense :—

- (1) to refuse to use its Plenary Powers to suppress the generic name *Buchia* Rouillier, 1845 ;
- (2) to place the under-mentioned name on the *Official List of Generic Names in Zoology* :—*Buchia* Rouillier, 1845 (gender : feminine) (type species, by monotypy : *Avicula mosquensis* von Buch, 1844) ;
- (3) to place the under-mentioned specific name on the *Official List of Specific Names in Zoology* :—*mosquensis* von Buch, 1844, as published in the combination *Avicula mosquensis* (specific name of type species of *Buchia* Rouillier, 1845) ;
- (4) to place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—*Aucella* Keyserling, 1846 (a junior objective synonym of *Buchia* Rouillier, 1845).

**15. Objection received from W. J. Arkell (Sedgwick Museum, University of Cambridge) :** On 13th December 1955, Dr. W. J. Arkell (*Sedgwick Museum, University of Cambridge*) addressed the following letter to the Office of the Commission in which he expressed his objection to the action proposed in the present case :—

If an application had been made to preserve *Aucella* long ago, when *Buchia* was first disinterred, I would have been wholeheartedly for it. But my feeling now is that it is too late. For years authors have adapted themselves to the necessity of using *Buchia* and it has appeared repeatedly in print in much of the literature of recent years. I have myself used *Buchia* (with reluctance) in my *Jurassic Geology of the World* (1956). It is too late to change that now, and I think the Commission would be letting down those who try to keep to the Rules of Nomenclature if, 25 years after, they were to turn round and put the law-abiding in the wrong.

**16. Objection received from R. V. Melville (Geological Survey and Museum, London) :** On 14th December 1955, Mr. R. V. Melville (*Geological Survey and Museum, London*) addressed the following letter to the Office of the Commission in which he expressed his objection to the action proposed in the present case :—

Jeletzky's *Aucella* versus *Buchia* application : I am not familiar with this genus, which is not commonly represented in British fossil faunas, and I do not feel qualified to discuss the stratigraphical angle. My own view, which I am not yet in a position to support with documentation, is that *Buchia* should be allowed to stand, particularly as there is a family-group name, BUCHIIDAE, involved.

**17. Objection received from Kurt Teichert (Petroleum Geology Laboratory, Federal Center, Denver, Colorado, U.S.A.) :** On 15th May 1956, Dr. Jeletzky communicated to the Office of the Commission the following copy of a letter dated 16th January 1956 which he had received from Dr. Curt Teichert (*Petroleum Geology Laboratory, Federal Center, Denver, Colorado, U.S.A.*), setting out the grounds on which he considered that on balance it would be better to retain the name *Buchia* Rouillier than to validate the name *Aucella* Keyserling :—

Among the papers you sent me was your application to the International Commission on Zoological Nomenclature to preserve the name *Aucella* in preference to *Buchia*. I have read your presentation of the case with great interest. The best person to have made such an application would, of course, have been Cox, after he had rediscovered *Buchia* in 1929. You say that he was the first to accept the priority of the name *Buchia*, "but he did not give any reasons". To me it would seem that discovery of the priority of a name was sufficient reason to use it, but I agree that under the circumstances a good case for retention of *Aucella* could have been made. Now, 27 years after publication of Cox's paper the literature is divided and the name *Buchia* has been rather widely used. Another 20 years, and there is a good chance that *Aucella* will have been forgotten, especially if it is relegated to synonymy in the *Treatise on Invertebrate Palaeontology*. I am saying this not because I have used *Buchia* myself, which is of little concern, but because the object of the International Rules is to create stability. My personal belief is that not much good will be done by switching back from *Buchia* to *Aucella* at the present moment. However, if the Commission rules otherwise I shall meekly submit.

There can be little doubt, in my opinion, about the validity of the name *Buchia*. Since Rouillier, in 1845, was himself the Secretary of the *Société imperiale des naturalists de Moscou*, he no doubt composed the note on *Buchia* himself, notwithstanding its impersonal style. The villain in the piece is Keyserling who in 1846 must have known about Rouillier's name. There were not that many palaeontologists in Russia in those days.

**18. Comment received from D. T. Donovan (University of Bristol, Department of Geology, Bristol) :** On 2nd January 1956, Dr. D. T. Donovan (*University of Bristol, Department of Geology, Bristol*) communicated to the Office of the Commission the following statement in which he reviewed the issues involved in the case of *Aucella* versus *Buchia*, at the same time intimating that that paper was not intended to constitute a definite opinion on the question of the action which it was desirable that the International Commission should take in the present case :—

**Proposed use of the Plenary Powers to preserve  
the generic name “*Aucella*”**

As an author who has employed the name *Buchia* I may fairly be regarded as prejudiced in my opinion on the subject. I should, however, like to make the following observations on the case presented by Dr. Jeletzky, without expressing a clear-cut opinion as to the course of action which the Commission should take.

1. I agree with Dr. Jeletzky's remarks (his para. 2) as to the wide geographical and stratigraphical distribution of the genus. As he says, the genus is of stratigraphical value, although when reading his observation that its importance “appears to be second only to that of the ammonites” one must bear in mind that it is a very poor second. Dr. Jeletzky is correct, however, in saying that in some cases no other fossils are available for correlation.

2. If the name *Buchia* had not been revived by Cox (1929), there is little doubt that the proper course would be to validate *Aucella* and so legalise the general usage. But (as pointed out by Dr. Jeletzky) a number of writers have followed Cox since 1929, in a sincere effort to abide by the Rules, and so it is necessary to examine the present position.

3. When the name *Buchia* was used by Cox in 1929, he pointed out that it was the senior synonym and therefore the valid name of *Aucella* Keyserling. Dr. Jeletzky says “but he [Dr. Cox] did not give any reasons”. There was no occasion for Cox to give reasons apart from the clear fact of priority.

4. Since 1929 the name *Buchia* has advanced a good way towards acceptance by stratigraphers and palaeontologists who are specialists in the period covered by *Buchia*-bearing sediments. (To workers who adopt the name, cited by Jeletzky, may be added Waterston, 1951; Arkell, 1947 (: 103); Arkell, 1956.) All specialists are now aware of the synonymy and would not be inconvenienced by the application of the Rule of Priority, especially as neither generic name has been used in any other sense or in any other group of animals, nearly or remotely related. From the point of view of the specialist there is therefore no need to validate *Aucella*, provided that the original publication of *Buchia* be regarded as valid.

5. The issue may be regarded as one between specialists and geologists who are not specialists so far as the genus in question is concerned. It is only on the claims of the latter, in the present writer's opinion, that a case for *Aucella* can be made. Dr. Jeletzky is correct in stating that the name *Aucella* was universally used until 1929, and appears in a large number of publications. If *Buchia* be upheld, then a large number of old publications are rendered incorrect. On the other hand, there has been an effort by authors of general works as well as by specialists (Jeletzky, para. 6), to employ *Buchia*, although others preferred to retain the more familiar *Aucella*, giving *Buchia* as a synonym. It is clear that by about the beginning of the 1939 war most, if not all, of the persons concerned were aware that *Buchia* was the correct name, and the deliberate retention of *Aucella* by some was inexcusable; the correct course was either to use *Buchia* or to petition the International Commission on Zoological Nomenclature. These later users of *Aucella* usually used some form such as "*Aucella* (= *Buchia*)" and the general convenience would have been equally well served by using "*Buchia* (= *Aucella*)"; their deliberate flouting of the Rules can hardly be used to support an application for suspension.

6. The present writer therefore believes that the case must be decided (assuming that the dates of *Buchia*: 1845 and *Aucella*: 1846 are accepted by the Commission as the correct ones) according to whether the question of validating the usage in publications from 1846 to 1929, to eliminate confusion from the point of view of non-specialist users of the name, is considered of sufficient importance to warrant a suspension of the Rules.

### References

- Arkell, W. J., 1947. "Geology of the country around Weymouth, Swanage, Corfe and Lulworth." *Mem. geol. Surv. G.B.*
- Arkell, W. J., 1956. *Jurassic Geology of the World*
- Waterston, C. D., 1951. "The Stratigraphy and Palaeontology of the Jurassic Rock of Eathie (Cromarty)." *Trans. Roy. Soc. Edin.* **62**, part 1 (No. 2)



19. Attitude of L. R. Cox (British Museum (Natural History), London) and R. V. Melville (Geological Survey and Museum, London) on the question of the validation of the family-group name "Buchiidae" Cox, 1953, in the event of the International Commission on Zoological Nomenclature deciding not to validate the generic name "Aucella" Keyserling, 1846 : On 18th March 1956 Mr. Hemming, while reviewing the issues involved in the present case, decided that it was desirable to obtain a further expression of opinion from specialists on the family-group-name problem involved. No difficulty was to be apprehended under this head in the event of the International Commission deciding to validate the generic name *Aucella* Keyserling, 1846, for the oldest family-group name for the family-group taxon involved was the name AUCELLIDAE Lanusen, 1897. If, however, the Commission were to reject the proposal that it should validate the generic name *Aucella* Keyserling and if in consequence the generic name *Buchia* Rouillier, 1845, were to be placed on the *Official List of Generic Names in Zoology*, the name for the family-group taxon would remain AUCELLIDAE, that name, as from Lanusen (1897) having many years' priority over the name BUCHIIDAE (which dated only from 1953). In that event therefore a situation would arise in which under a decision taken at Copenhagen in 1953 by the Fourteenth International Congress of Zoology the valid name for the family-group taxon would be a name based upon a junior objective synonym of the name of the type genus (1953, *Copenhagen Decisions zool. Nomencl.* : 36, Decision 54(1)(a)). In previous parallel cases the view had been advanced by the applicants and accepted by the Commission that it was desirable that a difference of the foregoing kind between a family-group name and the name of the type genus was undesirable and should be avoided by the use of the Plenary Powers. This question was accordingly put by the Secretary to Dr. L. R. Cox (*British Museum (Natural History), London*) and to Mr. R. V. Melville (*Geological Survey and Museum, London*). Both these specialists on being so consulted expressed the view that, if the Commission were to decide in favour of the retention of the generic name *Buchia* Rouillier, it was desirable that it should use its Plenary Powers to suppress the family-group name AUCELLIDAE Lanusen, 1897, thereby validating the family-group name BUCHIIDAE Cox. Shortly afterwards (on 19th March 1956) Mr. Melville addressed the following letter to the Office of the Commission in supplement



to the oral communication which he had already made to the Secretary :—

As I have already indicated to you, I think that the generic name *Buchia*, having been resuscitated by Cox nearly 20 years ago, should be maintained in preference to *Aucella*. If this is the view taken by the Commission, then I hold that the family-name involved in this case should be BUCHIIDAE and not AUCELLIDAE : I hold that the decision taken at Copenhagen (*Copenhagen Decisions*, para. 54(a), p. 36) was misguided, not only as it affects this particular case, but in general. In my view, the name of a family should always be formed from the stem of the name of the type-genus, and if the latter is changed, the former should be changed to conform.

**20. Procedural arrangements made by the Secretary in March 1956 for seeking a decision from the International Commission on the issues involved in the present case :** In March 1956 consideration was given by the Secretary to the procedural arrangements required for enabling the International Commission to reach decisions on the issues involved in the present case. The conclusion reached by Mr. Hemming was that it was desirable that the Voting Paper to be submitted in the present case should be divided into two parts on each of which the Members of the Commission would be invited to vote separately. Under this arrangement Part 1 of the Voting Paper would be concerned with the question whether or not the generic name *Aucella* Keyserling, 1846, should be validated by the suppression under the Plenary Powers of the older objective synonym *Buchia* Rouillier, 1845. Part 2 of the Voting Paper would be reserved for the question whether, if the Commission were to vote negatively on Part 1 (i.e. if it were to reject the proposal that the name *Aucella* Keyserling should be validated and if in consequence the name *Buchia* Rouillier were to be officially adopted), the family-group name AUCELLIDAE Lanusen, 1897, should be retained for the family-group taxon typified by the genus *Buchia* Rouillier or whether the Plenary Powers should be used to suppress the foregoing family-group name, thereby securing that the family-group name for the taxon of which *Buchia* Rouillier was the type genus should be BUCHIIDAE and not AUCELLIDAE. Further, Mr. Hemming took the view that it would be of assistance to the Commission in reaching decisions on the foregoing matters if it had before it drafts

of the affirmative decisions which would result under Part 1 and under Part 2 of the Voting Paper according to the nature of the vote given by the Commission. In pursuance of the arrangements described above Mr. Hemming on 18th March 1956 prepared the following paper for submission to the Commission simultaneously with the Voting Paper to be placed before the Commission in this case :—

### The “*Aucella*” Problem

Note by FRANCIS HEMMING, C.M.G., C.B.E.

(*Secretary to the International Commission on Zoological Nomenclature*)

The present application was submitted by J. A. Jeletzky (*Geological Survey of Canada, Ottawa, Canada*). It was published in May 1955 in Part 5 (pp. 158—166) of Volume 11 of the *Bulletin of Zoological Nomenclature*. Ten months have elapsed since the publication of this case and the issue of the Public Notices regarding it. It is therefore fully time for the Commission to take a vote on this case.

2. In essence this case is simple. Jeletzky considers that in the interest of stability and continuity it is desirable that the Commission should use its Plenary Powers to suppress the generic name *Buchia* Rouillier, 1845, in order to preserve the name *Aucella* Keyserling, 1846. The applicant regards the foregoing proposal as “one of urgency if serious confusion is to be avoided, for, while some palaeontologists have attempted to replace this name [*Aucella*] by the name *Buchia* Rouillier, the majority of palaeontologists and biostratigraphers throughout the world still adhere to the name *Aucella*” (: 158). Those who have lodged objection to this proposal have for the most part indicated that they would have supported the validation of the name *Aucella* if a proposal to that end had been submitted shortly after the re-introduction of the name *Buchia* by Cox in 1929, but are of the opinion that it would now be too late to take action in favour of the name *Aucella*.

3. In all, thirteen specialists have expressed their views on the present case. These are the following :—

(1) *In support of the present application, seven (7) :*

(a) Ralph W. Imlay (*United States Geological Survey, Washington, D.C., U.S.A.*)

(b) John B. Reeside, Jr. (*United States Geological Survey, Washington, D.C., U.S.A.*)

- (c) Wolf Maync (*Chief Paleontologist, Venezuelan Atlantic Refining Co., Caracas, Venezuela*)
- (d) Hubert G. Schenck (*Palo Alto, California, U.S.A.*)
- (e) F. H. McLearn (*Senior Geologist (retired), Geological Survey of Canada*)
- (f) S. Wm. Muller (*Stanford University, School of Mineral Sciences, Stanford, California, U.S.A.*)
- (g) J. A. Jeletzky (*Geological Survey of Canada*) (the applicant in the present case)

(2) *Against the present application, five (5) :*

- (a) C. A. Fleming (*N.Z. Geological Survey, Wellington, New Zealand*)
- (b) L. R. Cox (*British Museum (Natural History), London*)
- (d) R. V. Melville (*Geological Survey and Museum, London*)
- (d) W. J. Arkell (*Cambridge University, Cambridge*)
- (e) Curt Teichert (*Petroleum Geology Laboratory, Federal Center Denver, Colorado, U.S.A.*)

(3) *No definite view expressed, one (1) :*

- D. T. Donovan (*University of Bristol, Department of Geology, Bristol*).

4. Detailed particulars of the usage of the names *Aucella* and *Buchia* respectively are given on pages 159 to 161 of Jeletzky's paper, to which also an extensive bibliography is attached (: 163—166). The Commission will, no doubt, wish to consider the information so furnished jointly with the comments received from specialists, when taking its decision in the present case.

5. As there is a difference of opinion among the specialists who have expressed their views on this case (for the application, seven (7), including the applicant ; against, six (6)), I have thought that it would be for the convenience of the Commission if, instead of being asked to vote for, or against, the proposal submitted, it were to be asked to vote affirmatively either for the validation of the name *Aucella* (the

proposal submitted by Jeletzky) or for the acceptance of *Buchia* (and the consequent rejection of *Aucella*). These alternatives are set out in Part 1 of the Annexe to the present paper: Alternative "A" (validation of *Aucella*); Alternative "B" (rejection of proposal for the validation of *Aucella*).

6. There is one point connected with this application, to which reference should be made. This is concerned with the family-group-name problem involved. By some specialists the genus in question is placed in the family AVICULIDAE, but by others it is regarded as the type genus of a separate family-group taxon. By those who have continued to use the generic name *Aucella* the name employed is AUCELLIDAE Lanusen, 1897, *Paleozoomorpha* (original title in Cyrillic characters) (: 351). For those who have accepted the name *Buchia* the name used is BUCHIIDAE Cox, 1953 (*Falkland Is. Dependencies Survey, Sci. Rep. No. 4* : 6). If the Commission were to vote in favour of the generic name *Aucella*, the correct family name would be AUCELLIDAE Lanusen in virtue of priority, while at the same time the name BUCHIIDAE Cox would automatically be suppressed under the provisions of *Declaration 20* (1955, *Ops. Decls. int. Comm. zool. Nomencl.* **10** : i—viii). If on the other hand the Commission were to vote in favour of *Buchia* (i.e. against *Aucella*), the name of the family, under Decision 54(1) of the Copenhagen Congress (1953, *Copenhagen Decisions zool. Nomencl.* : 36) would still be AUCELLIDAE, notwithstanding the disappearance of the name *Aucella*, unless some specialist were to invoke the procedure laid down by Decision 45 of the same Congress (: 33). In that case protection would be given to the later name BUCHIIDAE if no objection was lodged against that name in the two-year period following the date on which action was taken under Decision 45. Cox, strongly supported by Arkell and Melville, takes the view that, if their objection to *Aucella* meets with the approval of the Commission, that is, if the name *Aucella* is sunk as a synonym of *Buchia*, the family name BUCHIIDAE ought to be upheld. Since Copenhagen Decision 45 referred to above is incapable of producing a definite decision for at least two years, it could not be used to secure the definitive acceptance of the name BUCHIIDAE concurrently with that of the name *Buchia* in the Ruling to be given in the present case. Accordingly the only means by which such a decision could be obtained would be by the use by the Commission of its Plenary Powers to suppress the name AUCELLIDAE Lanusen at the same time that it rejects the name *Aucella*, the effect of such a decision being to validate the name BUCHIIDAE Cox at the same time that the name *Buchia* was accepted in place of the name *Aucella*. This is the course recommended by the palaeontologists named above. In Part 2 of the Annexe to the present paper an opportunity is accordingly provided for those Commissioners who may vote in favour of the generic name *Buchia* as against the name *Aucella* to vote separately on the question whether, following the acceptance of the name *Buchia* the family name BUCHIIDAE



Cox should be validated by the suppression of the name AUCELLIDAE Lanusen.

## ANNEXE

### PART 1 : Alternative Draft Rulings on the “Aucella ” case

#### ALTERNATIVE “A”

(Validation of “Aucella ” Keyserling, 1846)

(1) Under the Plenary Powers the under-mentioned generic name is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy :—*Buchia* Rouillier, 1845 (Class Lamellibranchiata).

(2) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* :—*Aucella* Keyserling, 1846 (gender : feminine) (type species by selection by Herrmannsen (1852) : *Avicula mosquensis* von Buch, 1844), as defined by the lectotype selected by Pavlov (1907).

(3) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* : *mosquensis* von Buch, 1844, as published in the combination *Avicula mosquensis*, interpreted as specified in (2) above (specific name of type species of *Aucella* Keyserling, 1846).

(4) The under-mentioned generic name is hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—*Buchia* Rouillier, 1845, as suppressed under the Plenary Powers under (1) above.

(5) The under-mentioned family-group name is hereby placed on the *Official List of Family-Group Names in Zoology* :—AUCELLIDAE Lanusen, 1897 (type genus : *Aucella* Keyserling, 1846).

(6) The under-mentioned family-group name is hereby placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—BUCHIIDAE Cox, 1953 (a junior objective synonym of AUCELLIDAE Lanusen, 1897, the respective type genera of these family-group taxa having the same species as type species).

#### ALTERNATIVE “ B ”

(Rejection of the proposal to validate “Aucella ” Keyserling, 1846)

(1) The request for the suppression under the Plenary Powers of the generic name *Buchia* Rouillier, 1845 (Class Lamellibranchiata) for the

purpose of validating the name *Aucella* Keyserling, 1846, is hereby rejected.

(2) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology*: *Buchia* Rouillier, 1845 (gender : feminine) (type species, by monotypy : *Avicula mosquensis* von Buch, 1844, as defined by the lectotype selected by Pavlov (1907)).

(3) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology*:—*mosquensis* von Buch, 1844, as published in the combination *Avicula mosquensis*, interpreted as specified in (2) above (specific name of type species of *Buchia* Rouillier, 1845).

(4) The under-mentioned generic name is hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*:—*Aucella* Keyserling, 1846 (a junior objective synonym of *Buchia* Rouillier, 1845).

(5) [For alternative proposals regarding the family-group name to be accepted in the event of the refusal to validate the generic name *Aucella* Keyserling, 1846, see Part 2 of the present Annexe.]

**PART 2 : Alternative Proposals for dealing with the family-group-name problem involved in the event of the Commission refusing to validate the generic name “*Aucella*” Keyserling, 1846**

**ALTERNATIVE “X”**

*(Proposal to secure that the family name for the genus “Buchia” shall be BUCHIIDAE and not AUCELLIDAE, a name based upon the name of a junior objective synonym of “Buchia” Rouillier)*

*(Note : The under-mentioned Rulings would follow Rulings (1) to (4) set out in Alternative “B” in Part 1 of the present Annexe and would therefore bear the numbers (5), (6) and (7) respectively.)*

(5) Under the Plenary Powers the family-group name AUCELLIDAE Lanusen, 1897 (type genus : *Aucella* Keyserling, 1846) is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(6) The under-mentioned family-group name is hereby placed on the *Official List of Family-Group Names in Zoology*:—BUCHIIDAE Cox, 1953 (type genus : *Buchia* Rouillier, 1845).

(7) The under-mentioned family-group name is hereby placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—AUCELLIDAE Lanusen, 1897, as suppressed under the Plenary Powers under (5) above.

#### ALTERNATIVE “ Y ”

*(Proposal under which the family name for the genus  
“ Buchia ” would be AUCELLIDAE, a name based upon  
the name of a junior objective synonym of  
“ Buchia ”)*

*(Note : The under-mentioned Rulings would follow  
Rulings (1) to (4) set out in Alternative “ B ” in Part 1  
of the present Annexe and would therefore bear the  
numbers (5) and (6) respectively.)*

(5) The under-mentioned family-group name is hereby placed on the *Official List of Family-Group Names in Zoology* :—AUCELLIDAE Lanusen, 1897 (type genus : *Aucella* Keyserling, 1846).

(6) The under-mentioned family-group name is hereby placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—BUCHIIDAE Cox, 1953 (a junior objective synonym of AUCELLIDAE Lanusen, 1897, the respective type genera of these family-group taxa having the same species as type species).

### III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

**21. Issue of Voting Paper V.P.(56)16 :** On 29th March 1956 a Voting Paper (V.P.(56)16) in regard to the present case was issued to the Members of the Commission, together with the explanatory paper, the text of which has been reproduced in paragraph 20 of the present *Opinion*. In accordance with the arrangements explained in the foregoing paper, the above Voting

Paper was divided into two Parts, on which the Members of the Commission were invited to vote on the following issues :—

**Part 1 :** In this Part the Members of the Commission were invited to vote for one or other of “ the following alternatives set out in Part 1 of the Annexe to the paper numbered Z.N.(S.) 827 submitted by the Secretary simultaneously with the present Voting Paper :—

Alternative “A” (validation of generic name *Aucella* under the Plenary Powers)

or

Alternative “ B ” (refusal to validate the generic name *Aucella*).

**Part 2 :** In this Part, which was concerned with the “ treatment to be accorded to the family-group name BUCHIIDAE if by its vote under Part 1 above the Commission were to accept *Buchia* in preference to *Aucella* ”, the Members of the Commission were invited to vote for one or other of “ the following alternatives set out in Part 2 of the Annexe to the paper numbered Z.N.(S.) 827 submitted by the Secretary simultaneously with the present Voting Paper :—

Alternative “ X ” (acceptance of BUCHIIDAE as the family-group name for *Buchia*)

or

Alternative “ Y ” (acceptance for *Buchia* of the family-group name AUCELLIDAE, a name based upon *Aucella*, a junior objective synonym of *Buchia*) ”.

**22. The Prescribed Voting Period for Voting Paper V.P.(56)16 :**  
As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 29th June 1956.



**23. Particulars of the Voting on Part 1 of Voting Paper V.P.(56) 16 :** At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(56)16 was as follows :—

(a) *In favour of Alternative “A” (validating “Aucella” Keyserling, 1846), fifteen (15) :*

Holthuis ; Mayr ; Hering ; Boschma ; Riley ; Lemche ; Bodenheimer ; Tortonese ; Key ; Hankó ; Jaczewski ; Hemming ; Bonnet ; Miller ; Kühnelt ;

(b) *In favour of Alternative “B” (refusal to validate “Aucella” Keyserling, 1846), nine (9) :*

Sylvester-Bradley ; Prantl ; Dymond ; do Amaral ; Esaki ; Vokes ; Stoll ; Cabrera ; Mertens ;

(c) *On Leave of Absence, one (1) :*

Bradley (J.C.) ;

(d) *Voting Papers not returned :*

None.

**24. Deadlock resulting from the vote taken on Part 1 of Voting Paper V.P.(56)16 :** When at the close of the Prescribed Voting Period on 29th June 1956 the votes cast on Part 1 of Voting Paper V.P.(56)16 were found to be as set out in paragraph 23 above, a situation of complete deadlock was disclosed, for on the one hand the proposal that the Plenary Powers should be used to validate the generic name *Aucella* Keyserling through the suppression of the name *Buchia*, though having secured a majority of the total votes cast, had failed to secure two out of every three of those votes—the affirmative votes being fifteen in number and the negative votes nine in number—while on the other hand the opposing proposal for the acceptance of the name *Buchia*

Rouillier and the rejection of the name *Aucella* Keyserling had been negated by a like majority. The voting on Part 2 of the foregoing Voting Paper was also ineffective, since the subject matter of that Part of the Voting Paper was such that it became meaningful only if a definite decision were taken on Part 1 in favour of the course of action there styled "Alternative 'B' ". It was evident therefore that a decision on the procedural issue involved would need to be obtained before any further progress could be achieved in securing a decision in the present case.

**25. Receipt in October 1956 of a notification from W. O. Dietrich (Humboldt-Universität zu Berlin) of support for the proposals submitted by J. A. Jeletzky :** On 23rd October 1956, Professor Dr. W. O. Dietrich (*Humboldt-Universität zu Berlin*) communicated to the Office of the Commission a copy of the following paper in support of Dr. Jeletzky's proposal for the validation of the generic name *Aucella* Keyserling which had just been published (Dietrich, October 1956, *Neues Jb. Miner., Mh., Abt. B* 10 : 449—450) :—

### **Aucella oder Buchia?**

Von W. O. DIETRICH (*Berlin*)

Die Frage ist zwar durch die Zeit längst von selbst zugunsten von *Aucella* entschieden, jetzt aber durch Jeletzky's Antrag an die I.C.Z.N. aktuell geworden ; sie zeigt, wie schwerfällig der Wissenschaftsbetrieb in der Paläontologie noch immer ist. Da der Fall so liegt dass formale Entscheidung nach dem Grundsatz Fiat justitia sehr wohl zur Einsetzung von *Buchia* als gültiger Name führen könnte, ist es nötig, die guten Gründe, die Jeletzky für die Gültigkeitserklärung von *Aucella* Keyserling 1846 gegen *Buchia* Rouillier 1845 anführt, zu unterstützen, bzw. zu vermehren.

Zeitgenossen beider genannten Autoren wie H. G. Bronn, H. B. Geinitz, F. J. Pictet, F. A. Quenstedt haben in ihren Lehr- und Handbüchern von *Buchia* überhaupt keine Notiz genommen. Weder in Bronns Index palaeontologicus 1848, noch in A. d'Orbigny's Prodrôme de Paléontologie stratigraphique universelle (1, 1849) wird *Buchia* aufgeführt. E. Beyrich gibt in seinen hinterlassenen schriftlichen

Notizen zur Paläontologie und Stratigraphie\* folgendes an : “*Aucella* Keys. Etym. *Aucella* sive *Avicella* i.q. [idem quod] *Avicula*. Autor gen. Keyserling 1846 in : Wiss. Beobacht. a.e. Reise in das Petschoraland. Geschichte : Nach Berlin kamen sie zuerst durch die alte russische Sammlung . . . Quenstedt legte sie 1835 unter die *Inoceramen* und verglich sie mit *Inoceramus striatus* des Gault. Schlotheim erhielt nach Bekanntmachung seiner Petrefakten ein grosses Moscauer Gesteinsstück voller Aucellen und nannte die Art in seiner Sammlung *Mytulites Gmelini* (Syst. Verz. 1832, p. 56). Fischer 1837 (Oryct. de Moscou) unterscheidet 2 Arten, die er als *Inoceramus rugosus* Bronn (= *I. dubius* Sow.) und *I. concentricus* Sow. bestimmt. Eine dritte Art bestimmt Fischer in der Revue des fossiles de Moscou als *I. undulatus* (Bull. de Moscou 1843 I S, 131). Die ersten Aucellen des russischen Jura, welche L. v. Buch erhielt, waren die zwei Muscheln, welche in Karstens Archiv 1840, S. 95 aufgeführt sind als : *Inoceramus Cripsii* Goldf. t. 112 f. 4 und *Inoceramus gryphaeoides* Sow. t. 584 [= *Aucellina*]. Obwohl er diese Muscheln mit entschiedenen Jurapetrefakten von gleicher Lokalität, Sysran an der Wolga, erhalten hatte und nichts von anderen Kreidepetrefakten aus dieser Gegend kannte, schien ihm doch die Ähnlichkeit mit Kreide-Inoceramen so gross, dass er meinte, sie müssten aus den benachbarten Kreidelagern harrühren, deren Patrefakte von Iasikow aufgeführt werden. Er verfiel hierbei in denselben Irrtum wie Fischer, der in der Oryctographie du gouvernement de Moscou 1837 eine jurassische *Aucella* aus derselben Gegend unter den Kreidepetrefakten als *Inoceramus concentricus* beschrieb.” Beyrich beschreibt diesen *Cripsii* L. v. Buchs ausführlich und kommt zu dem Ergebnis : “Ich halte nicht dafür, dass *Inoceramus Cripsii* L. v. Buchs a.a.O. in die Synonymik der Keyserlingschen *Aucella concentrica* gehöre, halte es aber für möglich . . . Die *Aucella* von Sysran kann als var. *lata* der *A. Fischeriana* angefügt werden : *A. Fischeriana* d’Orb. sp. var. *lata* Beyr.” Auszüge aus Keyserlings Werk zur Systematik und Verbreitung der *Aucella*-Arten beweisen Beyrichs eingehende Beschäftigung mit dem Gegenstand. Er notiert : “*A. mosquensis* Buch sp. Keys. l.c. p. 298, 299. Einzige Moskauer Art, die K. kennt und für ident erklärt mit *Avicula Fischeriana* d’Orb. *A. mosquensis* var. Keys. Zu dieser Varietät, meint Keyserling, werde gehören : *Inoceramus Cripsii* bei L. v. Buch. Breiter.” Keiner Erwähnung wird Rouillier’s getan. Daraus geht hervor, dass die alten Geognosten keine Prioritätsrechte anerkannten, wenn sie sich einmal für einen passenden Namen entschieden hatten. Sie waren nicht so empfindsam und nicht so ballast-freudig wie die Paläontologen des 20. Jahrhunderts.

Schliesslich findet sich im Nomenclator animalum generum et subgenerum 1, Berlin 1926, S. 465 das Zitat : *Buchia* C. Rouillier, Bull. Soc. Moscou 21, p. 272, 1848. Moll. Lam. Der Verfasser dieses

---

\* Aufbewahrt im Archiv des Geologisch-paläontologischen Instituts und Museums der Humboldt-Universität zu Berlin.

Zitats, Johannes Thiele, Kustos der Mollusken-Abteilung am Zoologischen Museum Berlin, hat somit dem Namen *Aucella* die Priorität zuerkannt. Nach den Anweisungen des Nomenklators an die Mitarbeiter hätte er die Stelle der ersten Erwähnung des Namens *Buchia* angeben müssen.

### Literatur

Jeletzky, J. A. *Bull. zool. Nomencl.* **11**, Part 5, 158—166, May 1955  
London

**26. Breaking of the deadlock in the present case by the adoption by the Commission of "Declaration" 34 :** The procedural problem which in June 1956 prevented any further progress from being made in the present case was placed before the Commission by the Secretary on 28th March 1957 in a paper in which two alternative proposals were submitted for breaking the deadlock arising where in a case involving the possible use of the Plenary Powers a majority, but not a two-thirds majority, of the Members of the Commission vote in favour of the use of the foregoing Powers and in consequence the affirmative vote by the Commission is ineffective, while at the same time the proposal in favour of the opposing course of action is rejected by a majority. By a vote taken on Voting Paper V.P.(O.M.)(57)3 the proposal set out in the first of the alternatives referred to above was approved and adopted by the International Commission. The decision so taken was embodied on 21st May 1957 in *Declaration* 34. Under the terms of that *Declaration* it was provided that in a situation such as that described above (i) the vote taken was to be treated as a preliminary vote only, (ii) the result of that vote was at once to be reported to the Commission, (iii), simultaneously with (ii) above, the original proposal was to be resubmitted for decision on the basis that, if that proposal failed to secure two out of every three votes cast, the opposing proposal (the terms of which was at the same time to be submitted for information) was forthwith to be treated as having been approved by the Commission. The above *Declaration* was published on 3rd September 1957 (*Ops. Decls. int. Comm. zool. Nomencl.* **17** : i—xii).

**27. Preparation in May 1957 of revised proposals based upon the procedure prescribed in "Declaration" 34 :** Immediately following the adoption of *Declaration* 34 the Secretary on



28th May 1957 prepared for the consideration of the International Commission the following paper on the basis of the provisions prescribed by the foregoing *Declaration* :—

**Proposal for the taking of a vote under the procedure prescribed by  
“Declaration” 34 in relation to the application submitted by  
Dr. J. A. Jeletzky regarding the generic names “*Buchia*”  
Rouillier, 1845 and “*Aucella*” Keyserling, 1846 (Class  
Lamellibranchiata)**

By FRANCIS HEMMING, C.M.G., C.B.E.

(*Secretary to the International Commission on Zoological Nomenclature*)

The purpose of the present paper is to secure a decision from the International Commission on Zoological Nomenclature in regard to Dr. J. A. Jeletzky's proposals regarding the generic names *Buchia* Rouillier, 1845, and *Aucella* Keyserling, 1846 (Class Lamellibranchiata), the proposal in question being now submitted under the special procedure recently approved by the Commission by its vote on Voting Paper V.P.(O.M.)(57)3 and since embodied in *Declaration* 34 (now in the press)<sup>1</sup>.

2. The *Declaration* referred to above deals with the question of the procedure to be adopted when, on a vote being taken by the Commission on an application involving the possible use of its Plenary Powers, a majority, but not a two-thirds majority, of the Members of the Commission vote in favour of the use of the Plenary Powers and when in consequence the proposal so submitted fails on that vote to secure the approval of the Commission as a body. Since the foregoing *Declaration* has not yet been published, it may be convenient to recall that under its terms—which are those set out as Course (1) in the Paper submitted with the Voting Paper referred to above—a vote resulting in the indecisive manner here in question is to be treated as being a preliminary vote only and that thereafter the procedure to be adopted shall be as follows :—(1) An immediate report on the result of the vote is to be submitted by the Secretary who is at the same time to resubmit to the Commission the application for the use of the Plenary Powers in the case concerned, annexing thereto a statement setting out the affirmative action on the names in question which would require to be taken in the event of a definitive rejection of the application for the use of the Plenary Powers; (2) In any case re-submitted to the Commission in the foregoing manner the procedure to be followed at the close of the prescribed Voting Period in respect of the Voting Paper so submitted is to be as follows :—(a) If two out of every three Members of the Commission voting have voted in favour of the use of the Plenary Powers the proposal in question is to be treated as having been approved and adopted by the Commission,

<sup>1</sup> As noted in paragraph 26 of the present *Opinion*, the *Declaration* here referred to was published on 3rd September 1957.

but (b) if less than two out of every three Members of the Commission voting have voted in favour of the use of the Plenary Powers, that proposal is to be treated as having been rejected and in its place the proposal involving affirmative action in the opposite sense submitted under (1) above is to be treated as having been approved and adopted.

3. The application by Dr. Jeletzky with which the present paper is concerned was published in May 1955 in the *Bulletin of Zoological Nomenclature* (11 : 158—166). The principal purpose of that application was to secure the validation of the generic name *Aucella* Keyserling, 1846, by suppressing its senior objective synonym *Buchia* Rouillier, 1845. Dr. Jeletzky based his application on the need for maintaining continuity in nomenclature and for the avoidance of changing well-known names. The ground on which Dr. Jeletzky held that these considerations applied in the present case are set out in the application which he submitted to the Commission, to which reference should be made in connection with the Voting Paper now submitted. The specialists who since the publication of Dr. Jeletzky's application have expressed their opposition to his proposals have for the most based themselves on the view that in the period of about thirty years which has elapsed since the discovery of the name *Buchia* Rouillier, 1845, the consequent substitution of that name for the junior name *Aucella* Keyserling, 1846, till then used for this genus, has made such headway in the literature that it would not be desirable at this stage to validate the name *Aucella* Keyserling.

4. In the discussion of this case fourteen (14) specialists have communicated their views to the Office of the Commission. One of these comments (that by Professor Dr. W. O. Dietrich of Berlin) has been received since this case was last submitted to the Commission. Of the specialists referred to above, eight (8) have expressed themselves as being in favour of Dr. Jeletzky's proposal, five (5) are opposed to it, and one (1) did not express a definite opinion as to the action which it was desirable should be taken. The names of the specialists concerned are set out in Annexe 1 to the present paper.<sup>2</sup>

5. The proposal by Dr. Jeletzky discussed above was submitted to the Commission for vote on 29th March 1956 with Voting Paper V.P.(56)16. When at the close of the Prescribed Voting Period the votes cast by members of the Commission came to be counted, it was found that fifteen Members of the Commission had voted in favour of the use of the Plenary Powers in the manner recommended by Dr. Jeletzky and that nine (9) had voted in favour of the opposite course. There was thus a majority, but not a two-thirds majority, in favour of the use of the Plenary Powers in the sense recommended in the application.

---

<sup>2</sup> This Annexe is not here reproduced, the information contained in it having already been given in paragraph 3 of the paper reproduced in paragraph 20 of the present *Opinion*.

6. The vote described above produced a situation of absolute deadlock, for (1) the proposal submitted by Dr. Jeletzky in favour of the use of the Plenary Powers, though supported by a majority of the Commission, had failed to secure two out of every three votes cast and in consequence had failed to secure definitive adoption by the Commission, but (2) the affirmative proposal, the adoption of which would need to follow upon the rejection of Dr. Jeletzky's application, had secured only a minority of the votes cast by the members of the Commission.

7. It was in order to break a deadlock of this kind whenever it might arise that on 28th March 1957, I submitted to the Commission a paper (bearing the Registered Number Z.N.(S.) 1208) with which were placed before the Commission alternative courses, the adoption of either of which would serve to secure an affirmative decision in one sense or another in cases of this kind. As has already been explained (paragraph 1 above), the first of these courses was approved and adopted by the Commission and has since been embodied in *Declaration* 34.

8. It is in conformity with the provisions of the above *Declaration* that the particulars given above in paragraph 5 in regard to the votes cast on Voting Paper V.P.(56)16 are now submitted to the Commission. It is in further conformity with those provisions that Dr. Jeletzky's proposal (exclusive of the portion relating to family-group names later added by him thereto which is dealt with separately in paragraph 9 below) is resubmitted as Annexe 2 to the present paper. The Commission is invited to vote on that proposal in Part I of the annexed Voting Paper V.P.(O.M.)(57)8. Finally, in accordance with the same provisions I set out in Annexe 3 to the present paper the terms of the affirmative decision which would result either if the Commission were now to reject Dr. Jeletzky's proposal or if there were to be a majority, but not a two-thirds majority, in favour of that proposal.

9. The remaining problem involved in the present case is concerned with the family-group name to be used for the family containing the genus here in question. There are two family names concerned, namely, AUCELLIDAE Lanusen, 1897, and BUCHIIDAE Cox, 1953. Under Dr. Jeletzky's proposal if approved by the Commission, the generic name *Aucella* Keyserling, 1846, would be validated under the Plenary Powers by the suppression of the older name *Buchia* Rouillier, 1845. In that event the appropriate family name for the genus concerned would be AUCELLIDAE and that name would moreover be the valid name (a) because it has priority over *Buchia* Cox, and (b) because under the terms of *Declaration* 20 the suppression under the Plenary Powers of the generic name *Buchia* Rouillier would carry with it automatically the suppression of the family-group name BUCHIIDAE. Thus, if the

decision of the Commission were to be in favour of the validation of the name *Aucella* Keyserling (as proposed by Dr. Jeletzky), no difficulty would arise at the family-group name level. Such a difficulty would however arise if the Commission were to reject, or fail by a sufficient number of votes to approve, the foregoing proposal. For in that event, the name *Buchia* Rouillier would be accepted as the valid name for this genus but, in the absence of special action by the Commission, the correct name for the family concerned would remain AUCELLIDAE (since that name has priority over the name BUCHIIDAE), even though under that decision the generic name *Aucella* Keyserling would have been rejected and placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*. It was to prevent so anomalous a result in the foregoing circumstances that the proposal submitted included a recommendation that in the event of the Commission deciding in favour of the name *Buchia* and against the name *Aucella*, it should validate (under its Plenary Powers) the name BUCHIIDAE as against the name AUCELLIDAE. In the vote taken on Voting Paper V.P.(56)16 eight out of the nine members of the Commission who voted in favour of the name *Buchia* as against the name *Aucella* voted in favour of the validation of the name BUCHIIDAE by the suppression of the older name AUCELLIDAE. That question, on which those who voted in favour of *Aucella* did not participate, is now resubmitted for decision under the procedure prescribed in *Declaration* 34. In order to secure a final decision on this portion of the present case Members of the Commission are invited in Part 2 of the annexed Voting Paper to vote either for, or against the proposal that, if the vote on Part 1 of the Voting Paper results in the adoption of the generic name *Buchia* and the rejection of the name *Aucella*, the family-group name BUCHIIDAE Cox be validated by the suppression under the Plenary Powers of the name AUCELLIDAE Lanusen for the purposes of the Law of Priority but not for those of the Law of Homonymy. It is hoped that every Member of the Commission will vote on this Part of the annexed Voting Paper irrespective of how he may have voted on Part 1 thereof.

## ANNEXE 1

### Particulars of the specialists who have expressed opinions to the Office of the Commission on the *Aucella*/*Buchia* problem

(Editorial Note : This Annexe is not reproduced here, since all the information contained in it has already been given in paragraph 3 of the document reproduced in paragraph 20 of the present *Opinion*, with the exception of the record of the receipt, since the above document was written, of a notification of support for Dr. Jeletzky's proposals from Professor Dr. W. O. Dietrich (*Humboldt-Universität zu Berlin*), to which express reference was made in paragraph 4 of the present document.<sup>3</sup>)

<sup>3</sup> The text of the communication here referred to has been reproduced in paragraph 25 of the present *Opinion*.



## ANNEXE 2

**Proposal submitted by J. A. Jeletzky in favour of the validation  
of the name "Aucella" Keyserling, 1846**

*Proposal now re-submitted for final decision under  
the provisions of "Declaration" 34*

(1) Under the Plenary Powers the under-mentioned generic name is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy :—*Buchia* Rouillier, 1845 (Class Lamellibranchiata).

(2) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* :—*Aucella* Keyserling, 1846 (gender : feminine) (type species by selection by Herrmannsen (1852) : *Avicula mosquensis* von Buch, 1844), as defined by the lectotype selected by Pavlov (1907).

(3) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* : *mosquensis* von Buch, 1844, as published in the combination *Avicula mosquensis*, interpreted as specified in (2) above (specific name of type species of *Aucella* Keyserling, 1846).

(4) The under-mentioned generic name is hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—*Buchia* Rouillier, 1845, as suppressed under the Plenary Powers under (1) above.

(5) The under-mentioned family-group name is hereby placed on the *Official List of Family-Group Names in Zoology* :—AUCELLIDAE Lanusen, 1897 (type genus : *Aucella* Keyserling, 1846).

(6) The under-mentioned family-group name is hereby placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—BUCHIIDAE Cox, 1953 (a junior objective synonym of AUCELLIDAE Lanusen, 1897, the respective type genera of these family-group taxa having the same species as type species).

## ANNEXE 3

**Action which under "Declaration" 34 would result in the event of the  
proposal in favour of the validation of "Aucella" Keyserling, 1846,  
failing to receive a sufficient number of votes to secure  
adoption**

(1) The request for the suppression under the Plenary Powers of the generic name *Buchia* Rouillier, 1845 (Class Lamellibranchiata) for the

purpose of validating the name *Aucella* Keyserling, 1846, is hereby rejected.

(2) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology*: *Buchia* Rouillier, 1845 (gender : feminine) (type species by monotypy : *Avicula mosquensis* von Buch, 1844, as defined by the lectotype selected by Pavlov (1907).

(3) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology*:—*mosquensis* von Buch, 1844, as published in the combination *Avicula mosquensis* and interpreted as specified in (2) above (specified name of type species of *Buchia* Rouillier, 1845)

(4) The under-mentioned generic name is hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*:—*Aucella* Keyserling, 1846 (a junior objective synonym of *Buchia* Rouillier, 1845).

(5) [For a proposal regarding the family-group name to be accepted in the event of the refusal to validate the generic name *Aucella* Keyserling, 1846, see Part 2 of the Voting Paper annexed to the present paper.]

**28. Issue of Voting Paper V.P.(O.M.)(57)8 :** On 28th May 1957 a revised Voting Paper based upon the procedure prescribed in *Declaration* 34 was issued in the present case. As in the case of the previous Voting Paper, the present Voting Paper was divided into two Parts, the first being concerned primarily with the question of the possible validation under the Plenary Powers of the name *Aucella* Keyserling, 1846, by the suppression of the name *Buchia* Rouillier, 1845, the second with the situation which would arise at the family-group-name level in the event of the Commission deciding on Part 1 to reject the proposal for the validation of the name *Aucella* Keyserling. The propositions on which the Members of the Commission were so invited to vote were as follows :—

**PART 1 :** In this Part the Members of the Commission were invited to vote either for, or against, “ the proposal relating to the generic name *Aucella* Keyserling, 1846, as set out in Annexe 2 of the paper bearing the Registered Number Z.N.(S.) 827 submitted by the Secretary simultaneously with

the present Voting Paper ” [i.e. in the Annexe numbered as above to the paper reproduced in paragraph 27 of the present *Opinion*].

The following note was attached to this Part of the Voting Paper :—

*Note* :—In the event of the above proposal not receiving sufficient votes to secure approval, the Ruling to be given in this case will, under the provisions of *Declaration* 34, be as set out in Annexe 3 to the paper referred to above.

PART 2 : In this Part the Members of the Commission were invited to vote either for, or against, “ the proposal that, if the vote on Part 1 of the present Voting Paper results in the adoption of the generic name *Buchia* Rouillier and the rejection of the name *Aucella* Keyserling, the family-group name BUCHIIDAE Cox be validated by the suppression under the Plenary Powers of the name AUCELLIDAE Lanusen.

**29. The Prescribed Voting Period for Voting Paper V.P.(O.M.) (57)8 :** As the foregoing Voting Paper was issued under the One-Month Rule, the Prescribed Voting Period closed on 28th June 1957.

**30. Particulars of the Voting on Part 1 of Voting Paper V.P.(O.M.)(57)8 :** At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(O.M.)(57)8 was as follows :—

(a) *Affirmative Votes had been given by the following fifteen (15) Commissioners (arranged in the order in which Votes were received) :*

Lemche ; Hering ; Bradley (J.C.) ; Hankó ; Jaczewski ; Key ; Tortonese ; Bodenheimer ; Boschma ; Mayr ; Hemming ; Prantl ; Kühnelt ; Bonnet ; do Amaral ;

(b) *Negative Votes nine (9) :*

Riley ; Stoll ; Holthuis ; Esaki ; Dymond ; Vokes ;  
Mertens ; Sylvester-Bradley ; Cabrera ;

(c) *Voting Papers not returned one (1) :*

Miller.<sup>4</sup>

**31. Particulars of the Voting on Part 2 of Voting Paper V.P.(O.M.)(57)8 :** At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(O.M.)(57)8 was as follows :—

(a) *Affirmative Votes had been given by the following twenty-two (22) Commissioners (arranged in the order in which Votes were received) :*

Riley ; Lemche ; Stoll ; Hering ; Holthuis ; Bradley (J.C.) ;  
Esaki ; Hankó ; Dymond ; Jaczewski ; Vokes ; Mertens ;  
Sylvester-Bradley ; Tortonese ; Bodenheimer ; Boschma ;  
Hemming ; Cabrera ; Prantl ; Kühnelt ; Bonnet ; do  
Amaral ;

(b) *Negative Votes two (2) :*

Key ; Mayr ;

(c) *Voting Papers not returned, one (1) :*

Miller.<sup>4</sup>

**32. Declaration of Result of Vote on Voting Paper V.P.(O.M.)(57)8 :** On 29th June 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(O.M.)(57)8, signed a Certificate that the Votes cast on Part 1 and Part 2 of the above Voting Paper

---

<sup>4</sup> After the close of the Prescribed Voting Period a late vote was received from Commissioner Miller, in which he voted negatively on Part 1 and affirmatively on Part 2.

were as set out respectively in paragraphs 30 and 31 above. In the same Certificate Mr. Hemming made a declaration as follows :—

- (a) as regards Part 1 of Voting Paper V.P.(O.M.)(57)8 that the proposal submitted for the validation under the Plenary Powers of the generic name *Aucella* Keyserling, 1846, having failed to secure two votes out of every three votes cast, had been rejected and therefore that under *Declaration* 34 the alternative proposal set out in Annexe 3 to the paper submitted simultaneously with the above Voting Paper [i.e. the proposal set out in the Annexe numbered as above in the paper reproduced in paragraph 27 of the present *Opinion*] had been approved and adopted by the vote taken by the Commission on the foregoing Part of the above Voting Paper ;
- (b) as regards Part 2 of the Voting Paper cited above, that the question raised therein had become meaningful in consequence of the vote taken on Part 1 of the said Voting Paper as recorded in (a) above and that the proposal submitted therewith had been duly approved and adopted by the vote taken by the Commission on the foregoing Part of Voting Paper V.P.(O.M.)(57)8.

Finally, in the Certificate referred to above, Mr. Hemming made a declaration that the decisions recorded above were the decisions of the International Commission in the matters aforesaid.

**33. Preparation of the Ruling given in the present “ Opinion ” :**  
On 14th July 1957, Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposals approved by the International Commission in its Vote on the several Parts of Voting Paper V.P.(O.M.)(57)8.

**34. Original References :** The following are the original references for the generic and specific names placed on *Official*



*Lists and Official Indexes* by the Ruling given in the present *Opinion* :—

*Aucella* Keyserling, 1846, *Wiss. Beobacht. Petschora* **1846** : 297—301, pl. 16

*Buchia* Rouillier, 1845, *Bull. Soc. imp. Nat. Moscou* **18** : 289

*mosquensis*, *Avicula*, von Buch, 1844, *Neue Jahrb. f. Min.* **1844** : 537

**35.** The following is the reference for the selection of a lecto-type for a nominal species specified in the Ruling given in the present *Opinion* :—

For *Avicula mosquensis*  
von Buch, 1844

Pavlov (A.P.), 1907,  
*Nouv. Mém. Soc. imp. Nat.*  
*Moscou* **17**: 23-25

**36.** The references for the family-group names placed by the Ruling given in the present *Opinion* on the *Official List* and *Official Index* respectively of names of taxa of the family-group category are as follows :—

AUCELLIDAE Lanusen, 1897, *Paleozoomorpha* [transliteration of title from Russian Cyrillic characters] : 351

BUCHIIDAE Cox (L.R.), 1953, *Falkland Is. Dependencies Survey*, Sci. Rep. No. **4** : 6

**37.** The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

**38.** The present *Opinion* shall be known as *Opinion* Four Hundred and Ninety-Two (492) of the International Commission on Zoological Nomenclature.

DONE in London, this Fourteenth day of July, Nineteen Hundred and Fifty-Seven.

*Secretary to the International Commission  
on Zoological Nomenclature*

**FRANCIS HEMMING**